4: Cummins D-4 (no date) 1937 MD1 Syria MD1

As pointed out by Cummins and Steggerda (Am. J. Phys. Anthrop., XX, '35), the pattern types may be regarded as variants of 'pattern intensity.' The arch is not a pattern in the strict sense of the term, while loops and whorls may be regarded as levels of successively increasing pattern intensity. For statistical purposes arbitrary values are assigned to the pattern types: arch, 0; loop, 1; whorl, 2. The complement of patterns in an individual is then converted into the 'index of pattern intensity' by summating the values of

TABLE 2

Percentile occurrence of pattern types for each digit

Digit	I			II			III		
Hand	R	L	Both	R	L	Both	R	L	Both
Whorls	63.1	55.8	61.9	52.3	47.8	50.0	37.5	32.9	35.7
Ulnar loops	29.0	42.8	35.9	22.5	27.5	25.0	54.7	62.3	54.5
Radial loops	1.4	0.7	1.0	18.8	17.4	18.1	1.4	1.4	1.4
Arches	1.4	0.7	1.0	6.5	7.2	6.8	4.3	4.3	4.3

Digit	IV			V		
Hand	R	L	Both	R	L	Both
Whorls	50.0	44.2	47.1	24.6	20.3	22.4
Ulnar loops	48.6	55.8	52.2	74.6	79.0	76.8
Radial loops	0.7	0.0	0.3	0.0	0.0	0.0
Arches	0.7	0.0	0.3	0.7	0.7	0.7

R = right, L = left.

the ten patterns. The indices therefore range from 0, indicating ten arches, to 20, the value for ten whorls. The mean index in the present series is 13.96 ± 0.20. As a matter of record, providing for other statistical determinations such as the dactylodiagram of Poll, the frequencies of pattern types on separate digits are here recorded in table 3.

SUMMARY

Palmar main lines, axial triradii, palmar patterns and fingerprint patterns are analyzed in 138 Mitwali, a Syrian mountain population. It may be noted that the features present a close relationship to another Lebanese series as well as to the Bwala Arabs (unpublished data).

11: Hourani S-4 (no date) 1946 MD1 Syria MD1

abandoned the wandering life, taken to agriculture and mingled with the settled population already established in the country, which was itself largely the product of a similar process at an earlier time.

The immigrants from the Arabian peninsula brought with them their distinctive customs and ideas and one or other of the 'Semitic' family of languages. Together with Mesopotamia on the other side of the Fertile Crescent, Syria has been throughout history the place where what may, by a not very misleading simplification, be called the 'Semitic' stream of population and influences has met and mingled with other streams. She has served also as the limit of the emigration from Arabia. The Semitic peoples and their languages have never taken firm root beyond the Taurus Mountains. Even in Syria they have not been unopposed, but they have always been of great importance. A large proportion of the population of Syria can trace its descent at least in part to earlier or later immigrants from Arabia; and while Mediterranean and other influences have largely affected forms of government and the culture of the cities, the language and the customs of the countryside have always been predominantly Semitic.

The two sets of influences, that from Arabia and that from other directions, have interacted in various ways. There has been conflict at times, and at times peaceful mingling. Often tension of some sort has existed between the more predominantly Mediterranean and the more predominantly Arabian elements in the population, and between successive waves of settlers from the same source. Sometimes that tension has mirrored itself in the individual soul, which has felt itself drawn in two directions, towards the desert and towards the West. It is only very rarely, if at all, that the influences have blended so completely as to remove all tension. It is true that there has always been a tendency to that end. Rulers and settlers from the Mediterranean lands have to some extent adopted Semitic ways and Arabian immigrants have acquired some of the characteristics of a Mediterranean people. But the process has never been allowed to complete itself; further invasions have occurred, a new Government has established itself, or there have been further waves of immigration, and the process of assimilation has had to begin again.

Lebanon MEI
-4- Syria MDI

L
174 The Armenians are similar to the Lebanese in many of their characteristics but Professor Coon believes they represent a mixture of Alpine brachycephalics with the long headed Indo-Europeans. It will not be feasible to discuss Armenian racial origins in this paper as that involves the extensive racial movements in Iran, Turkey, Southern Russia and the Caucasus.

It does not appear that the Druzes migrated into Southern Lebanon and the Jebel Druze from outside as many believe. Likewise, the same is true for the Nitwali who are Shiite Moslems. Most likely religious leaders from outside Syria entered these districts and influenced the peoples already living there to accept these doctrines.

The Lebanese are remarkably homogeneous and the Nitwali, the Bahai males, and the Druzes are almost identical in their morphology. The scant data at hand suggests the same is true for the Nusairiyes.

S
141 The desert border: The anthropology of the desert border in-
162 habitants is as complicated as that of the Lebanese is simple. Six groups have been studied along the desert border — two Christian and four Moslem. The Christians were in Nhardeh, near Hama, and in Nafar, north of Damascus. The Moslems were in Hama, Nidjmeh and surrounding villages some twenty kilometers south of Damascus, in Hama in the center of the Nusairi and Circassians in and around Homsiye.

S
141 One of the statistical measures used to determine racial likeness is the significance ratio. I will not bother here with the formula, but will only say that if the significance ratio is three or less the inference is that the groups are not demonstrably different. Bear in mind I am not saying this is absolute proof but it is very suggestive.

It is interesting to point out that in every case the average significance ratio between each of the six desert border groups was above three. In other words, each group is strikingly different from the other. One might expect the Christian villagers to be closer to each other than they are to the surrounding Moslems, yet such is not the case. The mean significance ratio for the Nhardeh and the Nafar Christians is 3.40. The chief difference between these groups is head form, for the Nhardeh men tend to be round headed, mean cephalic index 84%, whereas the Nafar men are long headed men, 76%. In turn, the Nafar Christians when compared with the Hama Moslems have a mean significance ratio of 3.47, and a mean ratio of 3.40 when compared with the Aburdeis Bedouin. The Nidjmeh Moslems are the most divergent. But in spite of these differences we can say in general that the desert border dwellers are intermediate between the mountain dwelling Lebanese and the desert Bedouin. Or putting it another way, they are between the Lebanese Nisaris and the desert Mediterraneans.

S
141 It is not surprising that the desert border villagers show such
144 a great diversity, for this area has been subjected to numerous invasions. These plains and desert border cities have been ruled within historical times by Babylonians, Assyrians, Aramaeans, Amorites, Hebrews, Romans,

Syria MD1
Syrian Bedouin MD6

S
141 Nabateans, Arabs and Turks. In the region of Hama, the Hittites also had
144 important cities, for in Hama itself excellent examples of Hittite lions were excavated by Dr. Ingholt.

This racial zone is which the peoples of the different villages are dissimilar is not confined to the Syrian desert border but it also extends across northern Palestine and includes the villagers in Transjordan. Professor Keppers suggests that these peoples are representatives of the old Amorites. Personally, I believe that is an oversimplification of the problem. These may well be representatives of the Amorites but also many other racial groups are represented. It is interesting to point out, however, that hyperbrachycephalic peoples, so far at least, have not been encountered, though they are so prevalent in the Lebanons. This may be connected with habits of infant care.

B
101 In the desert: Five Bedouin tribes have been studied, the Rwala
144 or Sha'alan, the Muwaly and the Abeydat in the Syrian desert and the Howeitat and Beni Sakhr in the Transjordan. Bear in mind that these Bedouin tribes are most probably the purest members of the Mediterranean race living today. Since the dawn of Near East history, migration has been from the desert to the fertile plains and the cities, from the inland to the seaboard.

B
141 In my first studies in the Syrian desert, a very interesting
144 point was discovered. Whereas the Abeydat and the Muwaly Bedouin were very similar in their measurements and indices, mean significance ratio 2.21, the Muwaly-Rwala mean significance ratio was 9.84 and the Abeydat-Rwala 8.45. Later studies in the Transjordan desert on the Howeitat and Beni Sakhr Bedouin showed they were similar to each other, Beni Sakhr-Howeitat mean significance ratio was 2.87 and they in turn were close to the Rwala, the Beni Sakhr-Rwala ratio being 2.87. This marked splitting of these desert tribes suggests that these Bedouin belong to two different varieties of the Mediterranean race.

B
142 In spite of differences in measurements, the observable characteristics of the Bedouin are very similar. The hair form is usually straight or has low waves, the color is black or dark brown, with about 10% light brown. In quantity the facial hair is far below the average. Many Bedouin have a very sparse beard. The eye color is usually dark brown or light brown with eyes of mixed colors rather frequent among some of the tribes. For example: the Rwala have 22% grey-brown and % blue-brown eyes. Pure blue eyes were observed twice among the Muwaly, but not among the other Bedouin. The skin color of the Bedouin is brunet, light or dark brown. Fair skins are but rarely seen in the desert. The Bedouin is frequently pictured as having a very convex nose. Certainly that is incorrect for the Rwala and Muwaly have less than 10% of convex noses and the maximum is 22% for the Beni Sakhr. The Bedouin nose is actually large, very high, but straight and relatively thin.